

L8 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1999:681457 CAPLUS  
 DN 131:311763  
 ED Entered STN: 27 Oct 1999  
 TI Hydrophilic finishing composition and hydrophilic finished film with good  
 antibacterial and antifungal properties  
 IN Takazawa, Reiko  
 PA Nippon Light Metal Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D005-00  
 ICS C03C017-32; C08L033-02; C09D201-08; F28F001-32; F28F013-18;  
 C08J007-04; E04B007-12; C08L005-08; C08L005-00; C08L101-00  
 CC 42-10 (Coatings, Inks, and Related Products)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11293149	A2	19991026	JP 1998-102518	19980414 <--
PRAI	JP 1998-102518		19980414		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 11293149	ICM	C09D005-00
	ICS	C03C017-32; C08L033-02; C09D201-08; F28F001-32; F28F013-18; C08J007-04; E04B007-12; C08L005-08; C08L005-00; C08L101-00

AB The composition comprises mainly 10-90% (based on solid) a carboxyl-containing aqueous

polymer and 1-30% chitosan. Thus, a coating for Al plate was made from 90% Acumer 1510 and 10% acetylated chitosan.

ST antibacterial antifungal hydrophilic coating metal; chitosan polyacrylic acid coating aluminum plate

IT Coating materials  
(bactericidal; hydrophilic finishing composition and hydrophilic finished film with good antibacterial and antifungal properties)

IT Coating materials  
(fungicidal; hydrophilic finishing composition and hydrophilic finished film with good antibacterial and antifungal properties)

IT Coating materials  
(hydrophilic coatings; hydrophilic finishing composition and hydrophilic finished film with good antibacterial and antifungal properties)

IT 9003-01-4, Jurymer AC 10H 9003-04-7, Acumer 1510 9012-76-4D, Chitosan, acetylated 25087-26-7, Jurymer AC 30H 106173-75-5, Jurymer AC 50P  
 RL: BUU (Biological use, unclassified); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)

(hydrophilic finishing composition and hydrophilic finished film with good antibacterial and antifungal properties)

RN 9003-01-4

RN 9003-04-7

RN 9012-76-4D

RN 25087-26-7

RN 106173-75-5

L8 ANSWER 2 OF 3 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN

AN 2000-018836 [02] WPIX

DNN N2000-015027 DNC C2000-004426

TI Surface treating composition for preparation of hydrophilic surface layers and hydrophilic layers formed from it - contains chitosin.

DC A11 A14 A82 G02 J08 M13 Q43 Q78

PA (NIMI) NIPPON LIGHT METAL CO

CYC 1

PI JP 11293149 A 19991026 (200002)\* 7 C09D005-00 <--

ADT JP 11293149 A JP 1998-102518 19980414

PRAI JP 1998-102518 19980414

IC ICM C09D005-00

ICS C03C017-32; C08L033-02; C09D201-08; F28F001-32; F28F013-18

ICA C08J007-04; E04B007-12

ICI C08L005:00, C08L101:00; C08L005:08, C08L033-02

AB JP 11293149 A UPAB: 20000918

A surface treating composition (P1) for preparation of hydrophilic surface layers contains as essential components 10-90 weight % of water-soluble carboxyl group containing polymer (A) and 1-30 weight % of chitosan (B).

Also claimed is a hydrophilic surface layer (P2) that is formed by surface treatment by means of (P1) and contains as essential components (A) and (B).

Also claimed is a hydrophilic surface layer (P3) formed from (P1) on the surface of a substrate.

USE - (P1) is suitable for forming hydrophilic surface layers effective for antifogging and/or antistatic purposes on surfaces of various substrates, particular heat exchanger fins moulded from aluminium or aluminium alloy.

ADVANTAGE - (P1) forms durable hydrophilic films excellent also in anticorrosiveness and anti-fungal action on the surfaces of metals, plastics, and glass, partic. aluminium or aluminium alloy fin materials. Additionally, it hardly causes foaming in the coating processes and abrasion of moulds in moulding processes and generates no odour during coating and moulding.

Dwg.0/0

FS CPI GMPI

FA AB

MC CPI: A10-E09; A12-B; G02-A05; J08-D02; M13-H

L8 ANSWER 3 OF 3 JAPIO (C) 2005 JPO on STN

AN 1999-293149 JAPIO

TI HYDROPHILIC SURFACE TREATING COMPOSITION AND HYDROPHILIC SURFACE TREATING MEMBRANE

IN TAKAZAWA REIKO

PA NIPPON LIGHT METAL CO LTD

PI JP 11293149 A 19991026 Heisei

AI JP 1998-102518 (JP10102518 Heisei) 19980414

PRAI JP 1998-102518 19980414

SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1999

IC ICM C09D005-00

ICS C03C017-32; C08L033-02; C09D201-08; F28F001-32; F28F013-18

ICA C08J007-04; C08J007-04; E04B007-12

ICI C08L033-02, C08L005:08, C08L005:00, C08L101:00

AB PROBLEM TO BE SOLVED: To obtain a hydrophilic surface treating composition and a hydrophilic surface treating membrane capable of imparting excellent hydrophilicity and its durability, corrosion resistance and antimicrobial activity to the surface of a material to be coated, especially the metal surface of a fin material for heat exchange or the like consisting of aluminum or its alloy, or the surface of various kinds of plastic products, glass products or the like for the purposes of antifog treatments, antistatic treatments or the like.  
SOLUTION: This hydrophilic surface treating composition contains a carboxyl group-containing water-soluble polymer molecule and chitosan as essential components. Herein, the carboxyl group-containing water-soluble polymer is contained at a ratio of 10-90 weight% in terms of solid component, and at the same time, the chitosan is contained at a ratio of 1-30 weight%. Further, the hydrophilic surface treating membrane is formed by using said hydrophilic surface treating composition.